

Rec'd PCT/PTO 12 OCT 2004

INTERNATIONAL SEARCH REPORT

International Application No PCT/IB 03/01158

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G11B7/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 301 175 A (NAKAMURA YUICHI) 5 April 1994 (1994-04-05)	1, 3-6, 8-11
A	the whole document ----	2, 7
X	US 5 663 843 A (EZAWA HIROSHI ET AL) 2 September 1997 (1997-09-02)	1, 3-11
A	the whole document ----	2
X	EP 0 371 799 A (TOKYO SHIBAURA ELECTRIC CO) 6 June 1990 (1990-06-06)	1, 3-11
A	the whole document ----	2
A	US 5 285 434 A (KIM CHUN-DONG ET AL) 8 February 1994 (1994-02-08)	1-11
	the whole document ----	
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the International filing date
- *L* document which may throw doubts on priority, claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
---	--

11 September 2003

30/09/2003

Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax (+31-70) 340-3016	Authorized officer
---	--------------------

Kyranos, E

1

INTERNATIONAL SEARCH REPORT

Inte... on Application No

PCT/IB 03/01158

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6 016 292 A (LEE KWANG-SUK) 18 January 2000 (2000-01-18) the whole document -----	1-11

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte — onal Application No
PCT/IB 03/01158

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5301175	A	05-04-1994	JP	4366429 A	18-12-1992
US 5663843	A	02-09-1997	JP	8273177 A	18-10-1996
EP 0371799	A	06-06-1990	DE	68926024 D1	25-04-1996
			DE	68926024 T2	22-08-1996
			EP	0371799 A1	06-06-1990
			JP	2263337 A	26-10-1990
			JP	2758234 B2	28-05-1998
			KR	9305974 B1	30-06-1993
			KR	9305783 B1	24-06-1993
			US	5337865 A	16-08-1994
			US	5206762 A	27-04-1993
US 5285434	A	08-02-1994	KR	9513703 B1	13-11-1995
			JP	2740400 B2	15-04-1998
			JP	5081682 A	02-04-1993
US 6016292	A	18-01-2000	KR	220521 B1	15-09-1999
			KR	220522 B1	15-09-1999
			CN	1197978 A	04-11-1998
			FR	2762431 A1	23-10-1998
			JP	10283649 A	23-10-1998
			NL	1008437 C2	15-12-1999
			NL	1008437 A1	31-08-1998